

## CLAIMS

What is claimed is:

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1           1.       A flexible welding implement, comprising:  
2           a torch head operable to couple electricity to a welding electrode disposed therein;  
3           a cooling fluid supply tube operable to convey a cooling fluid to the torch head; and  
4           a first coiled wire spring operable to flexibly couple the cooling fluid supply tube to  
5 the torch head.

1           2.       The flexible welding implement as recited in claim 1, comprising:  
2           a cooling fluid return tube operable to convey the cooling fluid from the torch head;  
3 and  
4           a second coiled wire spring operable to flexibly couple the cooling fluid return tube  
5 to the torch head.

1           3.       The flexible welding implement as recited in claim 2, comprising:  
2           a gas supply tube operable to convey a gas to the torch head; and  
3           a third coiled wire spring operable to flexibly couple the gas supply tube to the torch  
4 head.

1           4.       The flexible welding implement as recited in claim 1, comprising a second  
2 cooling fluid supply tube secured to the torch head, wherein the cooling fluid supply tube is  
3 coupled to the second cooling fluid supply tube by the second coiled wire spring.

1           5.       The flexible welding implement as recited in claim 4, comprising a flexible  
2 tube disposed over the first coiled wire spring to define a fluid channel for the cooling liquid  
3 to flow from the gas supply tube to the second gas supply tube axially through the center of  
4 the first coiled wire spring.

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2           6.       The flexible welding implement as recited in claim 1, comprising a second  
3 cooling fluid return tube secured to the torch head, wherein the cooling fluid return tube  
4 is coupled to the second cooling fluid return tube by the second coiled wire spring.

1           7.       The flexible welding implement as recited in claim 5, comprising a second  
2 gas supply tube secured to the torch head, wherein the gas supply tube is coupled to the  
3 second gas supply tube by the third coiled wire spring.

1           8.       The flexible welding implement as recited in claim 6, comprising a second  
2 flexible tube disposed over the second coiled wire spring and a third flexible tube disposed  
3 over the third coiled wire spring.

1           9.       The flexible welding implement as recited in claim 7, comprising a handle  
2 disposed over the gas supply tube, the cooling fluid supply tube, and the cooling fluid  
3 return tube.

1           10.      A flexible welding implement, comprising:  
2 a torch coupleable to a handle, comprising:  
3               a torch head operable to receive a cooling liquid; and  
4               a spring disposed within the torch to enable the torch head to be displaced  
5               relative to the handle, wherein the torch directs the cooling liquid  
6               to flow axially through the spring to the torch head.

1           11.      The flexible welding implement as recited in claim 10, comprising a flexible  
2 tube disposed over the spring, a portion of the first tube, and a portion of the second tube to  
3 define a fluid channel for the cooling liquid to flow axially through the spring.

1           12.      The flexible welding implement as recited in claim 11, wherein the  
2 flexible tube comprises heat shrink tubing.

1           13.     The flexible welding implement as recited in claim 10, comprising a  
2     second spring disposed within the torch to enable the torch head to be displaced relative  
3     to the handle, wherein the torch is adapted to direct the cooling liquid to flow from the  
4     torch head axially through the second spring.

1           14.     The flexible welding implement as recited in claim 13, comprising a third  
2     spring disposed within the torch to enable the torch head to be displaced relative to the  
3     handle, wherein the torch is adapted to direct a gas to flow axially through the third spring  
4     to the torch head.

1           15.     The flexible welding implement as recited in claim 14, comprising a  
2     second tube coupleable to a cooling liquid return line and a third tube coupleable to a gas  
3     supply tube.

1           16.     The flexible welding implement as recited in claim 15, comprising a tube  
2     support member, wherein the first tube, the second tube, and the third tube are disposed  
3     through the tube support member.

1           17.     The flexible welding implement as recited in claim 10, comprising the  
2     handle.

1           18.     A welding implement, comprising:  
2                   a torch, comprising:  
3                         a torch head;  
4                         a tripod support system secured to the torch head to flexibly  
5                                 support the torch head, the tripod comprising:  
6                                 a first leg comprising a first spring;  
7                                 a second leg comprising a second spring; and  
8                                 a third leg comprising a third spring.

1           19.     The welding implement as recited in claim 18, wherein at least one of the  
2     legs is adapted to direct a fluid axially through the first spring.

1           20.     The welding implement as recited in claim 19, wherein the first leg is  
2     adapted to direct a gas axially through the first spring.

1           21.     The welding implement as recited in claim 20, wherein the second leg is  
2     adapted to direct a cooling fluid to the torch head axially through the second spring, and  
3     the third leg is adapted to direct the cooling fluid from the torch head axially through the  
4     second spring.

1           22.     The welding implement as recited in claim 18, comprising a plurality of  
2     tubes and a tube support member, wherein each leg of the tripod support system  
3     comprises a tube disposed through the tube support member.

1           23.     The welding implement as recited in claim 22, wherein each of the springs  
2     comprises a coiled wire spring secured to an end of one of the plurality of tubes.

1           24.     The welding implement as recited in claim 22, comprising a handle  
2     coupleable to the torch, wherein the tripod support system enables the torch head to be  
3     flexibly positioned relative to the handle.

1           25.     The welding implement as recited in claim 18, comprising a deformable  
2     support member extending through the tripod support system intermediate the first leg,  
3     the second leg, and the third leg.

1           26.     The welding implement as recited in claim 25, wherein the deformable  
2     support member comprises a plurality of wires braided together.

1           27.     The welding implement as recited in claim 26, wherein the plurality of  
2 wires comprises a first coiled portion disposed over the first leg, a second coiled portion  
3 disposed over the second leg, and a third coiled portion disposed over the third leg.

1           28.     A method of manufacturing a flexible welding implement, comprising:  
2           securing a coiled wire spring to an end of a first tube;  
3           securing a second tube to a torch head;  
4           securing the coiled wire spring to an end of the second tube; and  
5           disposing a flexible tube over the coiled wire spring to enable a fluid to flow  
6 through the first tube, the flexible tube, and the second tube to the torch head.

1           29.     The method as recited in claim 28, wherein securing a coiled wire spring to  
2 an end of a first tube comprises brazing the coiled wire spring to the end of the first tube.

1           30.     The method as recited in claim 28, wherein disposing a flexible tube over  
2 the coiled wire comprises applying heat to the flexible tube to shrink the flexible tube onto  
3 the coiled wire spring.

1           31.     The method as recited in claim 28, molding an insulating material over the  
2 flexible tube.

1           32.     The method as recited in claim 28, comprising disposing the first tube  
2 through a tube support member operable to support a plurality of tubes.

1           33.     The method as recited in claim 28, molding an insulating material over the  
2 flexible tube.

- 1           34.     The method as recited in claim 28, comprising disposed a coiled end portion  
2     of a support member over the first tube and securing an opposite end of the support member  
3     to the torch head.